Avery Weigh-Tronix

SCALES FOR AGRIBUSINESS

Model 1015 Indicator User's Manual

UNITED STATES

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CANADA

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la Class A prescrites dans le Reglement sur le brouillage radioelectrique que edicte par le ministere des Communications du Canada.

EUROPEAN COUNTRIES

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which the user may be required to take adequate measures.

CAUTION

Risk of electrical shock. Do not remove cover. No user service-able parts inside. Refer servicing to qualified service personnel.

Weigh-Tronix reserves the right to change specifications at any time.

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1015 Overview

The Model 1015 indicator, see Figure 1, is a batching indicator designed to be used on either portable or stationary feed mixers for accurate weight-based batching operations.

The Model 1015 has six primary modes of operation:

- simple weighing,
- single ingredient loading/unloading,
- single ingredient net loading/unloading,
- programmed recipe ingredient loading/unloading
- timer
- usage.

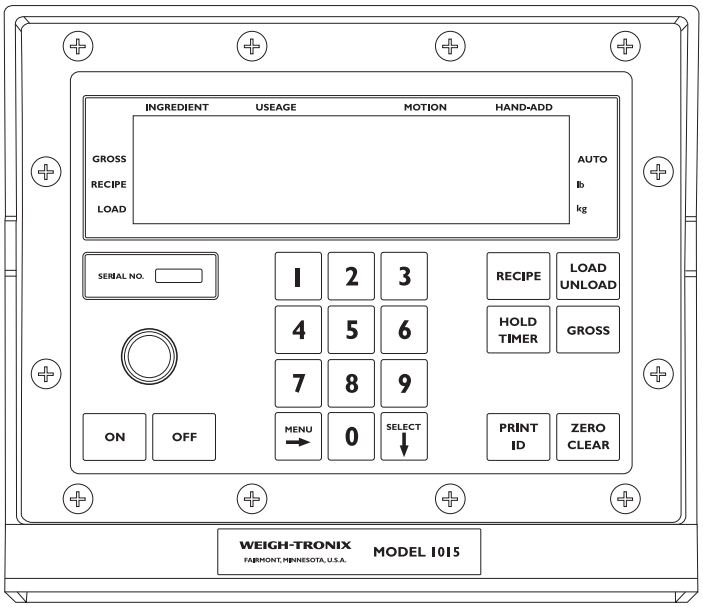


Figure 1
Front Panel of Model 1015 indicator

Simple Weighing

In simple weighing applications, press **GROSS** and weigh.

Single Ingredient Loading/Unloading

For single ingredient loading/unloading, enter a target amount, press **LOAD/UNLOAD**. Once the target is reached, the alarm will warn you to stop loading or unloading.

Single Ingredient Net Loading/Unloading

You can add ingredients until the desired weight is reached and tare off the weight of each individual ingredient. When you have added all the ingredients you can press **GROSS** to see the total amount of weight on the scale.

Programmed Recipe Ingredient Loading/Unloading

When you need multiple ingredients and recipes for loading or unloading, the recipe feature can be used. You can enter up to 100 recipes, and each recipe may consist of up to 100 ingredients.

Timer

Use the timer to mix a batch for a certain amount of time.

Usage

By accessing the usage mode, you will be able to monitor usage of all batched ingredients and recipes. You can either view usages or send them to a printer or computer. The following accumulators are available through the usage mode:

- single ingredient per recipe
- total of any ingredients per all recipes
- single recipe
- total of all recipes

Cable Connections and Power Requirements

Make sure all cables are connected as shown in Figures 2, 3 and 4 on the next page.

Voltage to the Model 1015 must be 10-18 volts DC, negative ground only. If voltage is between 8-10 volts, *Lo-bAt* is displayed on the indicator. Dropping below eight volts will cause the Model 1015 to automatically shut itself off, protecting the battery from being completely drained. Consult the *Model 1015 Service Manual* for instructions on disabling the automatic shut-off.

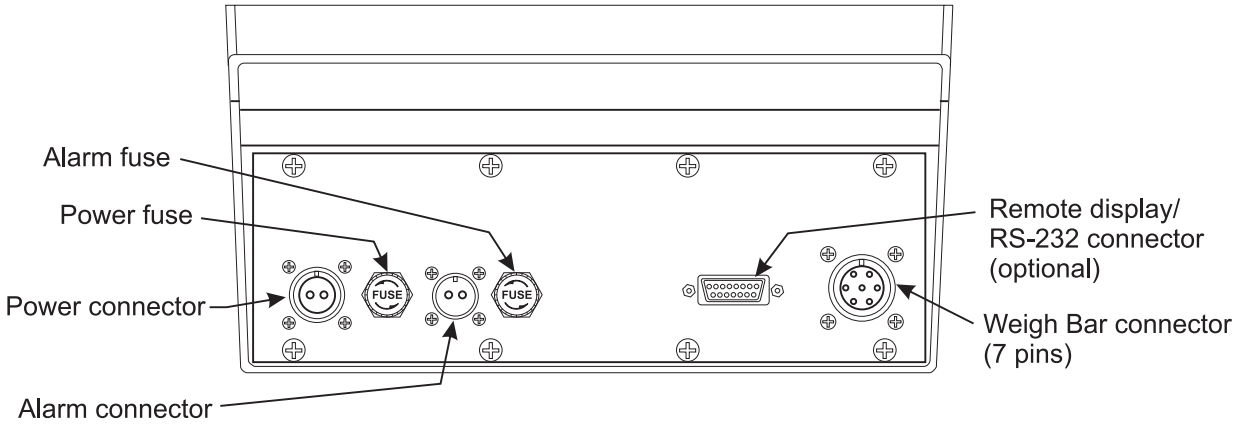


Figure 2
Indicator with 1 Weigh Bar Connector

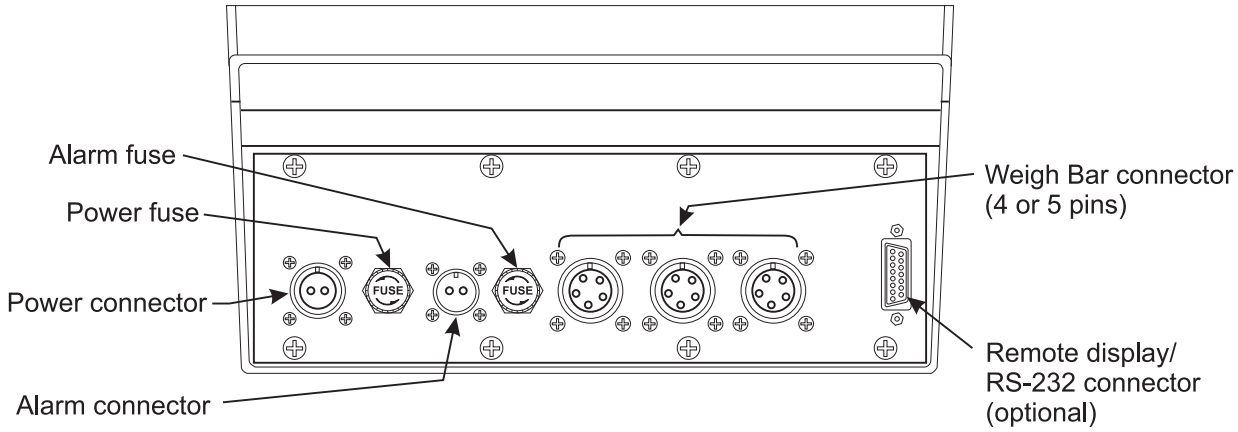


Figure 3
Indicator with 3 Weigh Bar Connectors

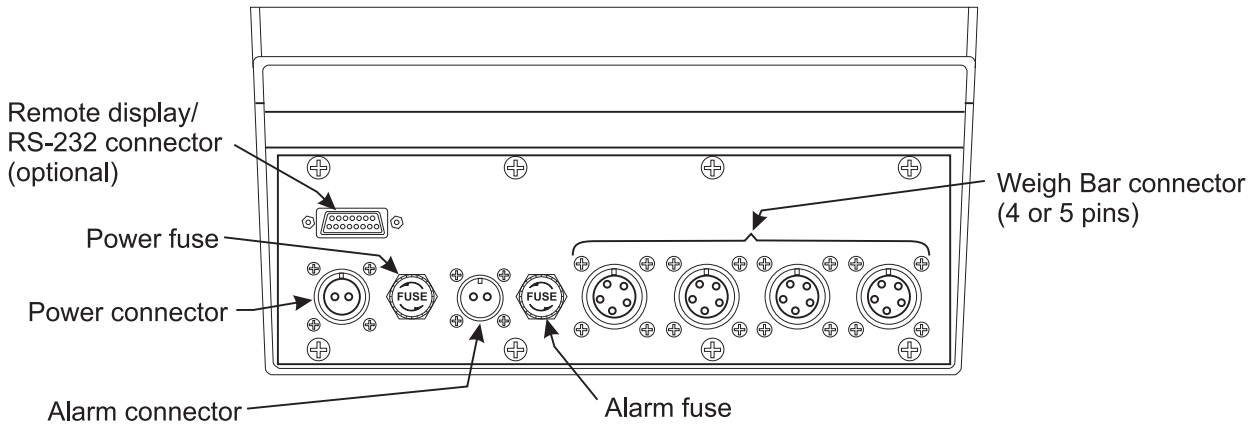


Figure 4
Indicator with 4 Weigh Bar Connectors

1015 Operations

Simple Weighing

GROSS MODE is required for zeroing. Your indicator must be zeroed before weighing begins.

1. Press **ON**. . .	Display shows ***HELLO***, then value is displayed in mode last used before removal of power.
2. Press **GROSS**. . .	Live scale weight is displayed in gross weighing mode.
3. Press **ZERO/CLEAR**. . .	Zero value is displayed. Weighing system is zeroed.
4. Place weight on the scale. . .	Live gross weight of material is displayed.

Loading/Unloading Ingredients Into a Feed Mixer

If you miskey Target Load Quantity, simply press **ZERO/ CLEAR** *to delete, then rekey.*

IF YOU HAVE A PRINTER, you may print actual net weight of the just-loaded ingredient by pressing **PRINT/ID** *from either Hold Mode.*

1. Zero indicator before loading first ingredient.	
2. Key in Target Load Quantity. . .	Quantity you intend to load is displayed.
3. Press **LOAD/UNLOAD**. . .	Target Load Quantity blinks and remains displayed, and the *Load* annunciator turns on.
4. Load/unload ingredient into/from feed mixer, viewing display as you do so. . .	Displayed value, showing net amount of your keyed in Target Quantity remaining to be loaded/ unloaded, decreases from Target Load Quantity toward zero. Alarm light flashes on and off when display has decreased to preprogrammed warning value, warning you to watch the display and giving you time to coordinate stop-page of material flow with display of zero net value.
5. When appropriate, stop loading/ unloading.	
6. Press any key. . .	Flashing alarm light shuts off, and if enabled, indicator advances into Auto-Hold mode, a holding mode that protects gross weight and displayed weight so you can move the scale.

7. Move feed mixer to its next ingredient loading/unloading station. . .

   Hold alternating with net amount loaded/unloaded is displayed.

8. Do either A or B:

   A. Key in a new Target Load/Unload Quantity, then press **LOAD/UNLOAD**,

OR

   B. Press **ZERO/CLEAR** (after pressing the **LOAD/UNLOAD** key), to restore last-loaded Target Quantity as the next Target Load/Unload Quantity. This is a convenient technique for loading/unloading a series of equal quantities. Indicator is ready for another ingredient loading/unloading cycle.

9. Repeat Steps 4 through 8 for each ingredient you want to load/unload, stopping with final ingredient after Step 6.

Loading or Unloading Net Ingredients

The warning alarm is nonfunctional in this loading/unloading procedure.

The indicator displays gross weight value of successive load or unload quantities. You may press **GROSS** *to view the gross weight at any time, and* **LOAD/UNLOAD** *to return to net display.*

Use this procedure to load a series of quantities onto the weighing system by watching the net weight of each additional load increase from zero. This procedure also allows you to unload a series of quantities from the weighing system by watching the net weight of each unload quantity increase from zero.

1. Zero the indicator.
   Note: *Do this only before loading the first in a series of loadings.*

2. Press the numeric **0** key.

   Display blinks and zero value remains displayed.

3. Press **LOAD/UNLOAD**.

   Display blinks again, zero value remains, and the *Load* annunciator is on. The display now reflects Net Weighing Mode.

4. Load or unload material and observe the display.

   Net weight value increases.

5. Stop loading or unloading material at the desired net value.

To Continue Loading or Unloading Successive Quantities:

6. Press **ZERO/CLEAR**. . . Displayed net value of material last loaded or unloaded is reset to zero.

> You may now view gross weight. Just press and hold in the **ZERO/CLEAR** key on your 1015 Indicator or your XM710-L Hand-held Transmitter . . .
>
> Release the **ZERO/CLEAR** key . . .
>
> Zero is again displayed in net weighing mode.
>
> If you press the XM710-L button for more than three (3) seconds, the display stays in gross mode.

7. **Load or unload** additional quantities by repeating Steps 4 through 7 as many times as required for this loading/unloading operation.

Recipe Entry Programming Modes

Before you can start programming recipes, the mode of recipe entry must be determined.

The model 1015 has two modes available:

a. Net weight or percent mode (standard factory configuration)

b. Amount per animal (see sections *Setting Equation Mode* and *Recipe Amount Per Animal* on the next page to configure to amount per animal)

Net Weight or Percent Mode

Example: Net Weight
Enter recipe such as: the sum of the ingredients is equal to your required batch size.

(ex: 4,000 lb batch)

1. 1000 lb (ingredient # 1 amount)
2. 1000 lb (ingredient # 2 amount)
3. 1000 lb (ingredient # 3 amount)
4. 1000 lb (ingredient # 4 amount)

t 4000 lb (total amount of all programmed ingredients, or standard batch size)

Afterwards, each time this recipe is batched, the user can enter the appropriate load amount to determine the size of the batch. All actual ingredients will be proportioned from the programmed recipe amount automatically.

Example: Percent
Enter recipe by entering the percent of each individual ingredient of the total batch so they total 100 (t=100) Same example as above would now be:

1. 25 (ingredient # 1 percent)
2. 25 (ingredient # 2 percent)
3. 25 (ingredient # 3 percent)
4. 25 (ingredient # 4 percent)

t 100 (total percent of all programmed ingredients)

Setting Equation Mode: Head Count

If you select head count, you must enter the recipes in amounts/100 head.

Again, when batched the ingredients will automatically be proportioned to achieve the desired load amount, based off the programmed recipe as entered.

This option allows you to set whether the indicator dispenses recipes based on percentage, net weight 1, or head count 2. (This feature is not present when using RCU-1015 software 47744-2008)

Follow these steps for setting the indicator in equation mode:

1. Key in **1015**.	***1015*** is displayed.
2. Press hidden **E** key and hold for for five seconds.	***1015 E*** is displayed.
3. Press **SELECT**.	***ConF*** is displayed.
4. Press **MENU** until ***EQuAtion*** is displayed.	
5. Press **SELECT**.	
6. Press **MENU** and scroll to desired setting.	
7. Press **SELECT**.	Equation mode is set.
8. Press **MENU** key to advance or press **GROSS** key to return to corresponding operational mode.	

Recipe Amount Per Animal

Make sure the indicator is configured for head count. See the previous section; Setting Equation Mode: Head Count

Use this mode to batch feed according to how many animals you need to feed. When entering the ingredients, you must enter them as net weight per 100 animals. The ingredients are entered as per 100 instead of per animal to insure more accuracy in producing the desired batch. Again the sum of the ingredients should equal the required batch size for 100 animals.

1. 1000 lb (ingredient # 1 amount per 100 animals)
2. 1000 lb (ingredient # 2 amount per 100 animals)
3. 1000 lb (ingredient # 3 amount per 100 animals)
4. 1000 lb (ingredient # 4 amount per 100 animals)

t 4000 lb (total amount of batched recipe for 100 animals)

Therefore, the example shows 1000 lb (10 lb/animal x 100 animals) to be entered for each of the four ingredients. The total batched amount shows 4000 lb (40lb/animal x 100 animals). Now when actually batching this recipe, the programmed load amount will be the current number of animals requiring feed.

Entering and Editing a Recipe

The 1015 allows you to enter and store recipes in memory where they can be recalled and edited. Each recipe contains a load amount, ingredient quantities, and a sum total of the ingredient quantities.

Entering a Recipe for the First Time

While in Gross, Load, or Timer modes, select a recipe number using one of the following methods.

Load amount can be by load weight, percent, or amount per animal. NOTE: make sure the M1015 is configured for the desired recipe entry mode.

1. Do either A or B:

A. Press **RECIPE** to recall the last viewed recipe. Then press **MENU** to scroll to the desired recipe number.

OR

B. Use the numeric keys to enter in the desired recipe number and press **RECIPE**.

2. Press **SELECT**. — ***t*** is displayed with a *0*. This indicates the sum total of the ingredients.

Ingredients do not need to be in numerical order and are displayed in the order that they are entered.

3. Press and hold **SELECT**. — _ _ is displayed.
4. Enter the first ingredient number and press **SELECT**.
5. Using the numeric keys, enter the ingredient load amount and press **SELECT**.
6. Repeat steps 4 and 5 until all desired ingredients have been entered.
7. Press **MENU**. — ***t*** is displayed with the sum total of the ingredients.
8. Press **SELECT**. — The recipe number is displayed.
9. Press **GROSS** to exit.

Entering Hand-Add Ingredients

Hand-add ingredients are typically defined as those ingredients that are used in such small amounts that, to guarantee accuracy, should be weighed on a smaller, separate scale.

To include a hand-add ingredient in a recipe:

1. Once ingredient number is displayed, enter load amount and press **HOLD/TIMER**. — The Hand-Add annunciator turns on.
2. Press **SELECT**. — Unless it is disabled, from now on the indicator will treat that ingredient as a hand-add whenever it is used.

To disable a hand-add ingredient in a recipe:

1. Display ingredient.
2. Press **HOLD/TIMER**.

Editing An Existing Recipe

While in Gross, Load, or Timer modes, select a recipe number using one of the following methods.

1. Do either A or B:

A. Press **RECIPE** to recall the last viewed recipe. Then press **MENU** to scroll to the desired recipe number.

OR

B. Use the numeric keys to enter in the desired recipe number and press **RECIPE**.

2. Press **SELECT**. — The first ingredient in the recipe is displayed.
3. Press **MENU** until the ingredient that you want to edit is displayed and use any or all of the following editing procedures.

Changing Ingredient Quantities

1. Using the numeric keys, enter desired ingredient quantity and press **SELECT**.

Deleting Ingredients

1. Press and hold **ZERO/CLEAR** until ingredient is deleted and the next ingredient is displayed.

Inserting Ingredients

1. Press **MENU** until you get to the ingredient **just after** where you want to insert the new ingredient.
2. Press and hold **SELECT**. _ _ is displayed.
3. Enter ingredient number and press **SELECT**.
4. Enter ingredient quantity and press **SELECT**. Repeat steps 2 and 3 for additional ingredients that you want to insert.
5. Press **MENU** to exit ingredient insertion and display next ingredient.

Press **RECIPE** or **SELECT** to exit ingredient editing and display current recipe or press **GROSS** to return to gross weighing mode.

Clearing a Recipe

While in Gross, Load, or Timer modes, select a recipe number using one of the following methods.

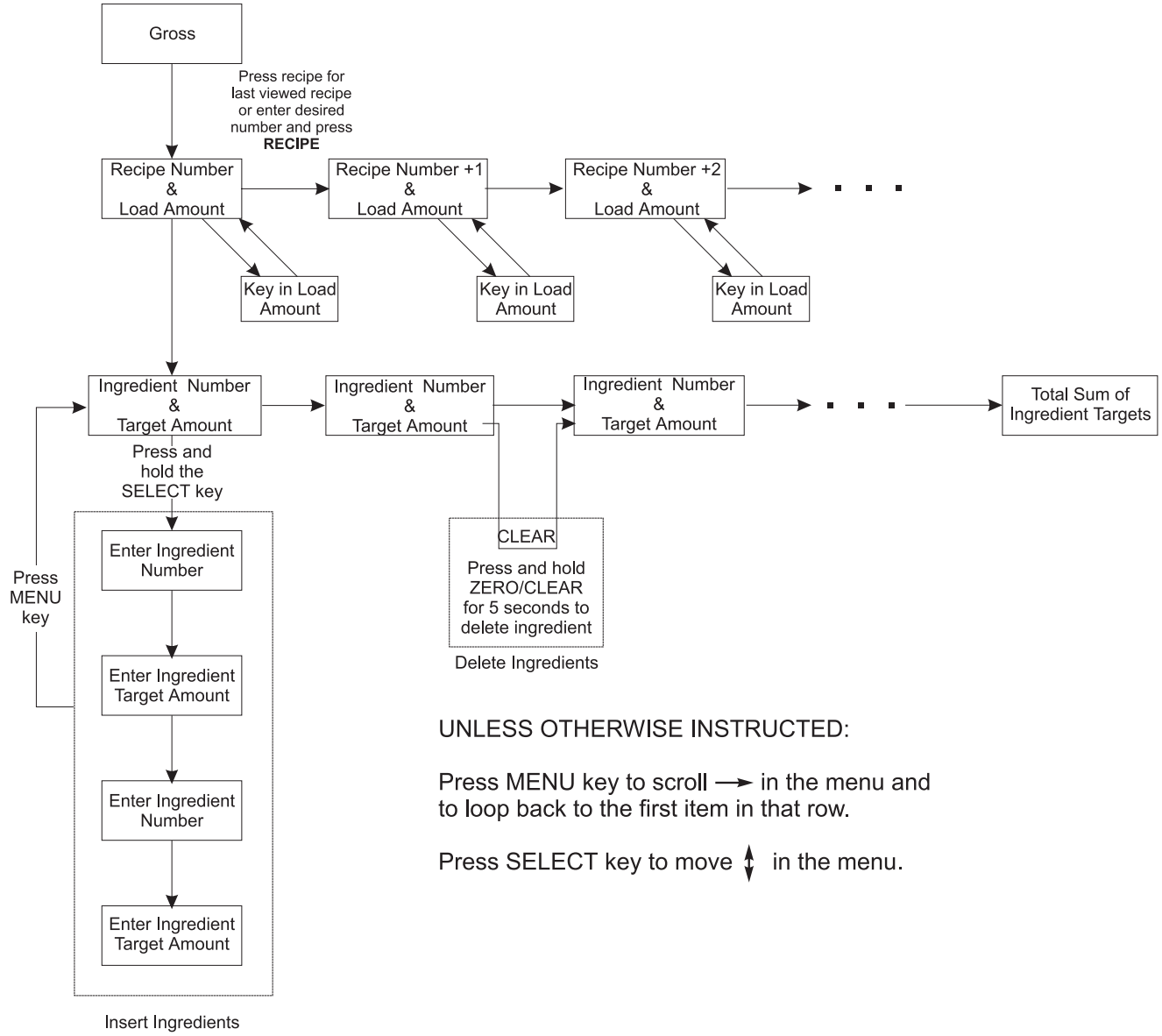
1. Do either A or B:

   A. Press **RECIPE** to recall the last viewed recipe. Then press **MENU** to scroll to the desired recipe number.

OR

   B. Use the numeric keys to enter in the desired recipe number and press **RECIPE**.

2. Press and hold **ZERO/CLEAR** key for three seconds. Recipe is now cleared.


Gross
Press recipe for last viewed recipe or enter desired number and press RECIPE
Recipe Number & Load Amount
Recipe Number +1 & Load Amount
Recipe Number +2 & Load Amount
Key in Load Amount
Key in Load Amount
Key in Load Amount
Ingredient Number & Target Amount
Ingredient Number & Target Amount
Ingredient Number & Target Amount
Total Sum of Ingredient Targets
Press and hold the SELECT key
Press MENU key
Enter Ingredient Number
Enter Ingredient Target Amount
Enter Ingredient Number
Enter Ingredient Target Amount
Insert Ingredients
CLEAR
Press and hold ZERO/CLEAR for 5 seconds to delete ingredient
Delete Ingredients

UNLESS OTHERWISE INSTRUCTED:

Press MENU key to scroll → in the menu and to loop back to the first item in that row.

Press SELECT key to move ↕ in the menu.

Figure 5
Entering and Editing Recipes Flowchart

Recipe Ingredient Loading Method

Recipe ingredient loading provides a simple method of consistent batching. Recipe load amounts determine the batch size, and ingredient amounts are calculated from the recipe to maintain correct proportions while producing the programmed load amount.

1. While in gross weighing mode, enter the number for the desired recipe and press **RECIPE.**

   Desired recipe and total ingredient load amount or number of head are displayed. NOTE: head count mode is only possible if your indicator is configured for it. Refer to the service manual for directions.

At any time, the user can switch between manual and auto advance by pressing **LOAD/UNLOAD**.

2. If you need to enter or change the total amount to be batched of the selected recipe or number of head, enter the new amount and press **SELECT**. Otherwise, skip this step and go to step 3.

3. Press **LOAD** to initiate loading of first ingredient.

4. Load the amount of the displayed ingredient.

   As weight is added, display will count to zero.

A flashing alarm signals that the weight is within alarm warning range and a steady alarm signals that the target amount has been reached.

5. Stop loading ingredient when the alarm signals that the target amount has been reached.

6. Depending on your system setup, either:
   a. The indicator will automatically advance to the next ingredient

OR

   b. You will have to manually advance the indicator to the next ingredient.

   A. Auto Advance Method -

   When the scale is stable, the Motion annunciator not lit, and the amount loaded is within the range of the target amount, the amount displayed will be accepted and the next ingredient shown. Repeat steps 4 through 6. Hand-add ingredients will need to be manually advanced.

   B. Manual Advance Method -

   When amount loaded is acceptable, press **MENU/→** or **Remote ZERO**. Repeat steps 4 through 6.

Mix Timer Operation

*To pause timer, press **HOLD/TIMER**. Pressing **HOLD/TIMER** a second time will cause the timer to resume count down.*

1. In gross weighing mode, enter mix time in hours, minutes, and seconds. For example,12 hours would be entered 120000.
2. Press **HOLD/TIMER**. Indicator will display mix time and immediately begin to count down. Alarm will sound when the specified time has elapsed.
3. To disable alarm and exit timer mode, press **GROSS**.

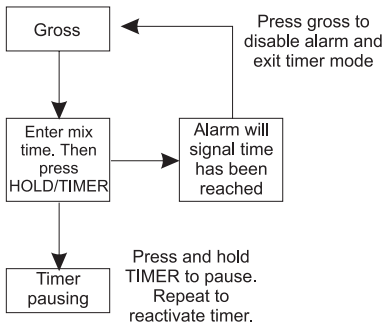

Gross
Press gross to disable alarm and exit timer mode
Enter mix time. Then press HOLD/TIMER
Alarm will signal time has been reached
Timer pausing
Press and hold TIMER to pause. Repeat to reactivate timer.

Figure 6
Timer Flowchart

Viewing Last Batch

To navigate through the menu options for this and the following sections, refer to Figure 7: Menu Options on the next page.

To view the most recent batch:

1. In gross weighing mode press and hold the **MENU** key until. . . ***L. bAtch*** is displayed.
2. Press **SELECT**. . . The number of the most recent recipe and the load amount is displayed.
3. Press **SELECT**. . . The ingredient number and the actual amount batched of it are displayed.
4. Press **MENU**. . . The next ingredient number and the actual amount batched are displayed.
5. Repeat step 4 until all ingredients and their batched amounts have been displayed.
6. After the last ingredient is displayed, press **MENU**. . . ***t*** is displayed with the sum of all the actual ingredients.
7. Press **RECIPE** or **SELECT**. The recipe number is displayed.
8. Press **GROSS** to return to gross weighing mode.

Press the **MENU** key to scroll → in the menu. Press the **SELECT** key to move ↕ in the menu.

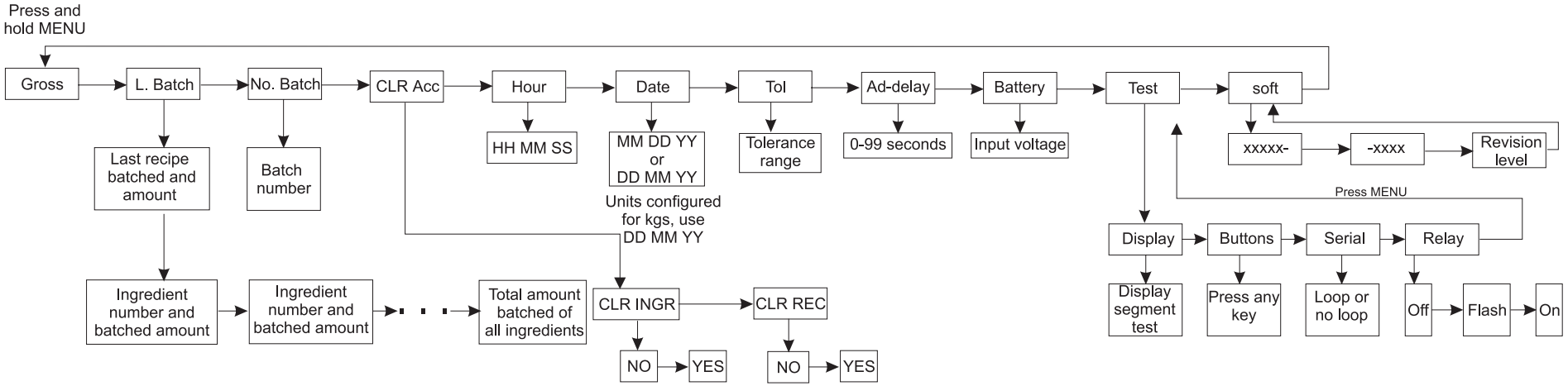


Figure 7
Menu Options

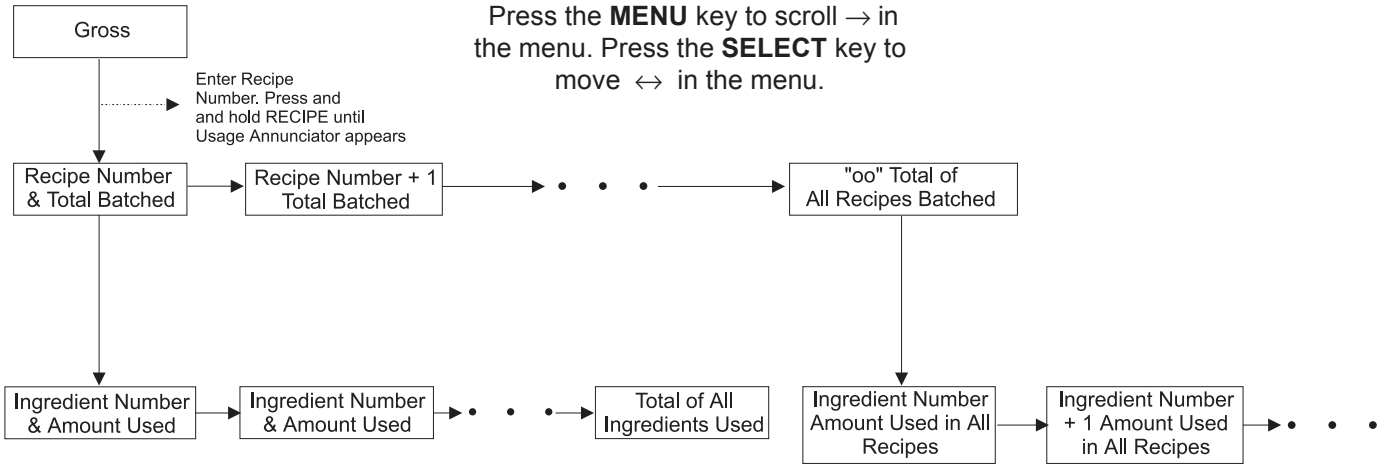

Gross
Press the MENU key to scroll → in the menu. Press the SELECT key to move ↔ in the menu.
Enter Recipe Number. Press and and hold RECIPE until Usage Annunciator appears
Recipe Number & Total Batched
Recipe Number + 1 Total Batched
"oo" Total of All Recipes Batched
Ingredient Number & Amount Used
Ingredient Number & Amount Used
Total of All Ingredients Used
Ingredient Number Amount Used in All Recipes
Ingredient Number + 1 Amount Used in All Recipes

Figure 8
Viewing Batch Accumulators Flowchart

Viewing Batch Accumulators

Total of Individual Recipes

Refer to Figure 7 (page 13) for menu flowchart.

1. In gross weighing mode, enter the recipe number, and press **RECIPE.**
2. When the appropriate recipe is displayed, press and hold **RECIPE** until the Usage annuciator appears.

The recipe number and actual batched amount for that recipe are displayed.

Total of Individual Ingredients Within A Recipe

1. In gross weighing mode, enter the recipe number and press **RECIPE**.
2. When the appropriate recipe is displayed, press and hold **RECIPE** until the Usage annunciator appears.

The recipe number and total batched amount for that recipe are displayed.

3. Press **SELECT**.

The first ingredient of the selected recipe and its actualbatched amount are displayed.

4. Press **MENU** to scroll through all the ingredients, each displayed with its total batched amount.
5. Press **RECIPE** or **SELECT**.

The recipe number and total batched amount are redisplayed.

6. Press **GROSS** to return to gross weighing mode.

Total of All Recipes

1. In gross weighing mode, enter recipe number and press **RECIPE**.
2. When the appropriate recipe is displayed, press and hold **RECIPE** until the Usage annunciator appears.

   The recipe number and actual batched amount for that recipe are displayed.
3. Press **MENU** to view each recipe and its total batched amount. After recipe *99*, the *oo* recipe will be displayed. This is a final accumulator that shows the total amount batched for all the recipes.

Total of Each Ingredient

1. In gross weighing mode, enter the recipe number and press **RECIPE**.
2. When the appropriate recipe is displayed, press and hold **RECIPE** until the Usage annunciator appears.

   The recipe number and total batched amount for that recipe are displayed.
3. Press **MENU** to view each recipe and its total batched amount. After recipe *99*, the *oo* recipe will be displayed. This is a final accumulator that shows the total amount batched for all the recipes.
4. Press **SELECT**.

   The first active ingredient number will be displayed with the actual amount of that ingredient batched in all recipes.
5. Press **MENU** to view each ingredient and its total batched amount.
6. To return to gross weighing mode, press **RECIPE** or **SELECT**, and then press **GROSS**.

Setting Batch Number Accumulator

Refer to Figure 7 for menu flowchart.

To set the batch number accumulator:

1. In gross weighing mode, press and hold the **MENU** key until ***L.bAtch*** is displayed.
2. Press **MENU**. ***no. bAtch*** is displayed.
3. Press **SELECT.** Using the numeric keys, enter the desired starting number.
4. Press **SELECT** to return to ***no. bAtch***.

Clearing Accumulators

Refer to Figure 7 for menu flowchart.

Clearing Single Ingredient Accumulators

1. In gross weighing mode, press and hold the **MENU** key until ***L.bAtch*** is displayed.
2. Press **MENU** until . . . ***Clr Acc*** is displayed.
3. Press **SELECT** until . . . ***Clr Ingr*** is displayed.
4. Press **SELECT** until . . . ***Clr no*** is displayed.
5. Press **MENU** until . . . ***Clr YEs*** is displayed.
6. Press **SELECT** until . . . ***Clr Ingr*** is displayed.
7. Press **GROSS** to return to gross weighing mode.

Clearing Recipe Accumulators

1. In gross weighing mode, press and hold the **MENU** key until ***L.bAtch*** is displayed.
2. Press **MENU** until . . . ***Clr Acc*** is displayed.
3. Press **SELECT** until . . . ***Clr Ingr*** is displayed.
4. Press **MENU** until . . . ***Clr rEC*** is displayed.
5. Press **SELECT** until . . . ***Clr no*** is displayed.
6. Press **MENU** until . . . ***Clr YEs*** is displayed.
7. Press **SELECT** until . . . ***Clr rEC*** is displayed
8. Press **GROSS** to return to gross weighing mode.

Viewing and Setting the Time

Refer to Figure 7 for menu flowchart.

1. In gross weighing mode, press and hold **MENU** until. . . — ***L.bAtch*** is displayed.
2. Scroll through the menu options by pressing the **MENU** key until. . . — ***Hour*** is displayed.
3. Press **SELECT**. . . — The time will be displayed in hours, minutes and seconds.
4. Enter the correct time allowing spaces for hours, minutes and seconds. For example, 1:59 would be entered as 15900.
5. Press **SELECT**. . . — ***Hour*** is redisplayed.
6. Press **GROSS** to return to gross weighing mode.

Viewing and Setting the Date

Refer to Figure 7 for menu flowchart.

1. In gross weighing mode, press and hold **MENU** until. . . — ***L.bAtch*** is displayed.
2. Scroll through the menu options by pressing the **MENU** key until. . . — ***dAtE*** is displayed.
3. Press **SELECT**. . . — The date is displayed in month, day, year.
4. To change the date, key in the new data.
5. Press **SELECT**. . . — ***dAtE*** is redisplayed.
6. Press **GROSS** to return to gross weighing mode.

Viewing and Setting the Auto Ingredient Advance Tolerance Range

The 1015 Indicator will automatically advance to the next ingredient in a recipe once a predetermined weight range is met and stays within the tolerance for the Ad-delay timer parameter. See the next section *Auto-Advance Delay Timer*. To set the tolerance range, complete the following steps.

Refer to Figure 7 for menu flowchart.

1. From gross weighing mode, press and hold the **MENU** key until. . . — ***L. bAtch*** is displayed.
2. Scroll through the menu options pressing the **MENU** key until. . . — ***tol*** is displayed.
3. Press **SELECT**. . . — The current tolerance range will be displayed.

The default tolerance range is ± 5 percent.

4. Using the numeric keypad, enter the desired tolerance range. This can be any number between 1 and 99. Setting this to 0 disables the function.
5. Press **SELECT** to enter the new range and return to ***tol***.

Auto-Advance Delay Timer

Ad-dELAY is a parameter in the User menu immediately after **tol**. This is a programmable timer from 0-99 seconds to delay auto-advancing to the next ingredient. **Ad-dELAY** enables better accuracy when loading an ingredient. It prevents advancing before the user is actually ready.

The weight must be within the tolerance for 1-99 seconds before it will advance forward. Selecting the default of 0 seconds disables the delay. If the weight falls outside the tolerance window before the **Ad-dELAY** parameter times out, then it retriggers itself when weight falls within the tolerance window again.

Using a Printer

If you have a printer, the following print options are available to you.

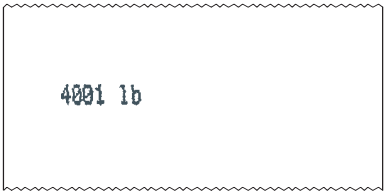
- Basic display printout
- Recipe printout
- Last batch printout
- Batch accumulator printouts

While all printed data includes the displayed value and the correct unit of measure, *lb* or *kg*, the printout format will vary depending on the options that you choose.

Basic Display Printout

1. In gross weighing mode, press **PRINT/ID**. . .

   Amount displayed on indicator will print as shown in sample below.



Basic Display Printout Sample

Printing ID

To print out an ID number, in the Gross mode key in a 6 digit number and then press **PRINT/ID** key. The indicator prints the following, for example:

ID 123456

The indicator then returns to the Gross Mode.

Recipe Printout

Alternate Printout Methods:
QuickPrint Method
While in gross mode, press 1, then **SELECT***, then* **PRINT***. Print-1 is displayed and all recipes are printed.*

Printing to a Computer via RS-232 port
Send a "1" (dec. 49 or HEX 31) Print-1 is displayed and all recipes are printed.

1. Display the desired recipe.
2. Press **PRINT/ID**. . .

Recipe number, ingredients, target amounts and totals will print as shown in the sample below. See note at left.

```
08/31/95    11:03:56
Recipe 01
Load Amt.     4000 lb
Ingredient  Target
01Ingr.        500 lb
02Ingr.        500 lb
03Ingr.       1000 lb
04Ingr.       1000 lb
05Ingr.       1000 lb
Total         4000 lb
```

Recipe Printout (Percent) Sample

```
08/31/95    11:02:37
Recipe 01
Head Cnt.      100
Ingredient  Target
01Ingr.        500 lb
02Ingr.        500 lb
03Ingr.       1000 lb
04Ingr.       1000 lb
05Ingr.       1000 lb
Total         4000 lb
```

Recipe Printout (Head Count) Sample

To print all the programmed recipes, press and hold **PRINT/ID** until ***PR-ALL*** is displayed.

3. Press **GROSS** to return to gross weighing mode.

Last Batch Printout

Press and hold the ***PRINT/ID*** key until **Pr-ALL** is displayed and the last 99 batches will be printed.

Alternate Printout Methods:
QuickPrint Method
While in gross mode, press 2, then **SELECT***, then* **PRINT***. Print-2 is displayed and the last 99 recipes batched with recipe/ ingredient information are printed.*

Printing to a Computer via RS-232 port
Send a "2" (dec. 50 or HEX 32) Print-2 is displayed and the last 99 recipes batched with recipe/ ingredient information are printed.

1. From gross weighing mode, press and hold the **MENU** key until. . .

L. bAtch is displayed.

2. Press **PRINT/ID**. . .

The last batch information will print as shown in the sample below. If your system is configured for auto print, it will provide a printout after each batch automatically. See note at left.

```
Batch#       6
08/31/95  11:15:00
Recipe 02
Load Amt.     4000 lb
Ingredient  Target    Actual
10Ingr.        500 lb     500 lb
11Ingr.       1500 lb    1501 lb
13Ingr.        500 lb     500 lb
14Ingr.        500 lb     500 lb
15Ingr.       1000 lb    1001 lb
Total         4000 lb    4002 lb
```

Last Batch Printout (Percent) Sample

```
Batch#       7
08/31/95  11:24:00
Recipe 02
Head Cnt.      100
Ingredient  Target    Actual
10Ingr.        500 lb     500 lb
11Ingr.       1500 lb    1501 lb
13Ingr.        500 lb     500 lb
14Ingr.        500 lb     500 lb
15Ingr.       1000 lb    1001 lb
Total         4000 lb    4002 lb
```

Last Batch Printout (Head Count) Sample

3. Press **GROSS** to return to gross weighing mode.

Batch Accumulator Printouts

An asterisk (*) denotes a hand-added ingredient.

Alternate Printout Methods:
QuickPrint Method
While in gross mode, press 3, then **SELECT**, *then* **PRINT**. *Print-3 is displayed and all individual recipe/ingredient accumulator total printouts are printed.*

Printing to a Computer via RS-232 port
Send a "3" (dec. 51 or HEX 33) Print-3 is displayed and all individual recipe/ingredient accumulator total printouts are printed.

Single Recipe/Ingredient Accumulator Totals

1. In gross weighing mode, enter the recipe number and press **RECIPE**.
2. When the appropriate recipe is displayed, press and hold **RECIPE** until the Usage annunciator appears.
3. Press **PRINT/ID**. . .

The accumulated ingredient totals for that specific recipe will print as shown in the sample below.

Single Recipe/Ingredient Accumulator Sample >

```
08/31/95    11:16:04
Recipe 01   12003 lb
Ingredient  Usage
01Ingr.      1500 lb
02Ingr.      1500 lb
03Ingr.      3001 lb
04Ingr.      3000 lb
05Ingr.      3002 lb
Total       12003 lb
```

3. Press **GROSS** to return to gross weighing mode.

All Recipe/Ingredient Accumulator Totals

1. In gross weighing mode, enter the recipe number and press **RECIPE**. Display any recipe, and press and hold **RECIPE** until the Usage annunciator appears.
2. Press and hold **PRINT/ID** until ***PR-All*** is displayed.

See note at left.

3. Release **PRINT/ID** key.

All recipe and ingredient totals will print as shown in the sample below.

All Recipe/Ingredient Accumulator Sample >

```
08/31/95    11:16:52
Recipe 01   12003 lb
Ingredient  Usage
01Ingr.      1500 lb
02Ingr.      1500 lb
03Ingr.      3001 lb
04Ingr.      3000 lb
05Ingr.      3002 lb
Total       12003 lb

Recipe 02   12006 lb
Ingredient  Usage
10Ingr.      1500 lb
11Ingr.      4503 lb
13Ingr.      1500 lb
14Ingr.      1500 lb
15Ingr.      3003 lb
Total       12006 lb
```

4. Press **GROSS** to return to gross weighing mode.

Alternate Printout Methods:
QuickPrint Method
While in gross mode, press 4, then **SELECT***, then* **PRINT***. Print-4 is displayed and the Total Recipe Accumulator is printed.*

Printing to a Computer via RS-232 port
Send a "4" (dec. 52 or HEX 34) Print-4 is displayed and the Total Recipe Accumulator is printed.

Total Recipe Accumulator

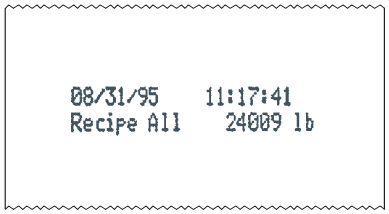
1. In gross weighing mode, enter a recipe number and press **RECIPE**. Press and hold **RECIPE** until the Usage annunciator appears.

   See note at left.

2. Using the **MENU** key, scroll to the ***oo*** recipe and press **PRINT/ID**.

   The total of all the recipes batched will print as shown in the sample below.

Total Recipe Accumulator Sample >



3. Press **GROSS** to return to the gross weighing mode.

Alternate Printout Methods:
QuickPrint Method
While in gross mode, press 5, then **SELECT***, then* **PRINT***. Print-5 is displayed and the Individual Recipe Accumulators are printed.*

Printing to a Computer via RS-232 port
Send a "5" (dec. 53 or HEX 35) Print-5 is displayed and the Individual Recipe Accumulators are printed.

Individual Recipe Accumulators

1. In gross weighing mode, enter a recipe number and press **RECIPE**. Press and hold **RECIPE** until the Usage annunciator appears.

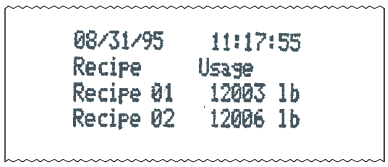
2. Using the **MENU** key, scroll to the ***oo*** recipe and press and hold **PRINT/ID** until ***Pr-All*** is displayed.

   See note at left.

3. Release **PRINT/ID** key.

   The total amount batched for each recipe with active usage recipe will print as shown in the sample below.

Individual Recipe Accumulators Sample >



4. Press **GROSS** to return to the gross weighing mode.

Individual Ingredient Accumulator Totals

1. In gross weighing mode, enter a recipe number and press **RECIPE**. Press and hold **RECIPE** until the Usage annunciator appears.
2. Using the **MENU** key, scroll to the ***oo*** recipe.
3. Press **SELECT**.
4. Display ingredient and press **PRINT/ID**.

The accumulator for the ingredient will print as shown in the sample below. See note at left.

Single Ingredient Accumulator Sample >

```
08/31/95    11:18:51
01Ingr.      1500 lb
```

5. Press **GROSS** to return to the gross weighing mode.

All Ingredient Accumulator Totals

1. In gross weighing mode, enter a recipe number and press **RECIPE**. Press and hold **RECIPE** until the Usage annunciator appears.
2. Using the **MENU** key, scroll to the *oo* recipe.
3. Press **SELECT**.
4. Display any ingredient, and press and hold **PRINT/ID** until ***PR-All*** is displayed.
5. Release **PRINT/ID** key.

The accumulators for all active ingredients will print as shown in the sample below.

All Ingredient Accumulators Sample >

```
08/31/95    11:19:06
Ingredient    Usage
01Ingr.      1500 lb
02Ingr.      1500 lb
03Ingr.      3001 lb
04Ingr.      3000 lb
05Ingr.      3002 lb
10Ingr.      1500 lb
11Ingr.      4503 lb
13Ingr.      1500 lb
14Ingr.      1500 lb
15Ingr.      3003 lb
Total       24009 lb
```

6. Press **GROSS** to return to the gross weighing mode.

Alternate Printout Methods:
QuickPrint Method
While in gross mode, press 6, then **SELECT***, then* **PRINT***. Print-6 is displayed and the Individual Ingredient Accumulators are printed.*

Printing to a Computer via RS-232 port
Send a "6" (dec. 54 or HEX 36) Print-6 is displayed and the Individual Ingredient Accumulators are printed.

Maintaining Displayed Weight

In a typical moving procedure, the scale is protected from display shift by Auto Hold mode.

Attention

If ingredient load amount is less than initial warning alarm value, the indicator does not advance into Auto Hold mode.

Attention

After loading an ingredient amount less than the initial warning alarm value, access Manual Hold mode before moving the scale.

Hold Mode Voids Effects of Moving

The Model 1015 Indicator provides a Hold Mode that can stabilize the weighing function so that move-induced effects are not measured or registered; weighing capability is re-engaged when you relocate the system and exit the Hold Mode to continue weighing. By using Hold Mode, you can be certain that the scale measures only what you want it to measure.

The Model 1015 provides both automatic and manual access to the Hold Mode.

Auto Hold Mode

Auto Hold allows the Model 1015 to stabilize gross and net weight so you can move the scale, following the typical operating procedure of moving the scale after you finish one load or unload cycle, and before you enter another Target Quantity.

> **Auto-Hold Mode** is enabled, and you may move the scale, while the display alternates between
>
> *(1) Hold* and
>
> *(2)* actual weight of material just loaded or unloaded.

You may press **PRINT/ID** from **Auto Hold Mode** to transmit to a printer the just-loaded or unloaded quantity.

Manual Hold Mode

Manual Hold allows you to re-enable the Hold Mode in case you have exited Auto Hold prior to moving the scale. This means you can check the gross weight and/or the overshot/undershot quantity right after loading or unloading, and restore the holding capability before moving.

Press **HOLD**.

> Manual Hold Mode is enabled; the scale is protected against display shift and it is safe to move the scale while you see the display alternate between
>
> *(1) Hold* and
>
> *(2)* actual weight of material just loaded or unloaded.

You may press **PRINT/ID** from Manual Hold Mode to transmit to a printer the just-loaded or unloaded quantity.

Troubleshooting

If you experience problems in the operation of your system, read through these troubleshooting steps and perform those which are appropriate. This information may help you to correct the following operational difficulties without calling your supplier or sending your equipment in for repair:

- Power-on
- Stalled Display Following Power-on
- Indicator Lock-up
- Inaccurate Weight Readings
- Alarm Light Malfunction
- Measuring the Supply Battery Voltage

Instructions for sending an indicator in for repair are provided in the last section under *Service Repairs*.

Power-On

If your indicator does not power-on, check the following possible problem sources in the order given. Attempt to power-on after trying each of these four troubleshooting steps:

1. **Check Battery Voltage.** Required voltage is 10-18 volts DC negative ground. If the voltage is between 8-10 volts, the indicator will display *Lo-bAt*. The indicator will automatically turn off if the incoming voltage drops below 8 volts or rises above 18 volts.
2. **Disconnect and Check Power Cable Connector** at the vehicle or AC to DC converter, clean if necessary, and reconnect.
3. **Replace Fuses.** Sometimes, a bad fuse can be recognized by an obvious break in the wire filament. However, such a break is not always observable, and getting a successful power-on after changing a fuse is often the only way of knowing that the fuse was indeed defective.

   Make sure new fuses are the proper size and have a current rating of five amperes. Using a fuse with too high a current rating can cause costly damage to the indicator and will void your warranty. The same is true for substituting wire, a nail, or any other object in place of a fuse.

   Place nothing in the fuse connector except a proper fuse.

   Change one fuse at a time (see instructions below). Try to power-on after changing the first fuse; if unsuccessful, change the second fuse and try to power on again. If changing the second fuse fails to allow successful power-on, proceed to the next trouble shooting step.

   To replace a fuse, first locate fuse caps on the bottom panel of the indicator. Then:

   1. Turn cap counterclockwise and lift out fuse & cap assembly.
   2. Remove old fuse from cap and insert new fuse.
   3. Replace fuse & cap assembly in fuse connector.

4. **Test Indicator and Cables** to isolate the source of the problem.

   a. Disconnect all cables on bottom panel of Indicator except for power cable. Do disconnect Weigh Bar® cables, and, if present, alarm cable remote display cable.

   b. Now try powering-on. If this is not successful, your problem is in the indicator and you should contact your supplier.

   c. If you are able to power-on with only the power cable connected, your problem is probably not in the indicator; continue troubleshooting.

   d. With power still on, plug in cables, one at a time — Weigh Bar® cables first, then alarm cable, then printer/remote display cable — until plugging in one of the cables causes the indicator to shut off. That cable is the bad one and needs to be repaired or replaced.

Stalled Display Following Power-On

This category of problems can exhibit any one of the following symptoms:

- An **illegible display** that cannot be zeroed and from which you cannot escape;
- A **legible display,** such as *HELLO,* that cannot be zeroed and from which you cannot escape;
- An **illuminated backlight** with no characters displayed and allowing no escape.
- ***No escape?*** If the red illumination on the display is visible, telling you the indicator has power (on a sunny day you may have to shade the display), you can possibly make the display function by doing a **Reinitialization** (explained below).

To Reinitialize a Stalled Indicator:

1. Press **OFF**.
2. Press **ZERO/CLEAR** and hold in, while you
3. Press and release **ON**.
4. Then release **ZERO/CLEAR**.

If the display says ***HI*** instead of ***HELLO*** following a reinitialization power-on, your indicator has a potential problem and should be repaired. Contact your supplier.

Indicator Lock-Up

A locked up indicator is represented by an illuminated alarm light and a display *of **Error**.*

1. Shut off the alarm by pressing any key.
2. **Test the Weigh Bar®cables** to isolate the source of the lock up problem, as follows:

   a. Disconnect all Weigh Bars®.

   b. Try to zero the indicator by pressing **GROSS** and **CLEAR**.

   - If you are **unable** to zero the indicator with the Weigh Bars® disconnected, the problem is in the indicator and you should contact your supplier.
   - If you are **able** to zero your indicator with the Weigh Bars® disconnected, then the problem is probably in the Weigh Bars® and you should continue troubleshooting.

3. Reconnect all Weigh Bars®. You will see ***Error*** displayed again.
4. If your Weigh Bar®connectors have the four-pin configuration, disconnect one Weigh Bar® and connect an adapter plug in its place.

   If your Weigh Bar® connectors have the five-pin configuration, disconnect one Weigh Bar®. No adapter plug is necessary.

5. Try to zero the indicator.

   Repeat Steps 4 and 5 with each Weigh Bar® cable, making sure each time that all cables are connected except the one you removed (for five-pin connector) or replaced with an adapter plug (for four-pin connector).

   A defective Weigh Bar® may be easily recognized with this method — **when a defective bar is replaced with an adapter plug** (for four-pin connector), **or removed** (for five-pin connector), **the indicator will zero properly.**

Inaccurate Weight Readings

First: Visually Inspect The Scale System for apparent problems and improper installation:

1. Check each cable, from source to indicator, for stress, cuts, breaks, or abrasions.
2. Unplug and reconnect each connector at the indicator to verify that it is tight and making good contact.
3. Check the hitch Weigh Bar® and verify that mounting bolts are tight and the hitch is not binding.
4. Check between the wheels and frame of the implement for mud and debris that might restrict Weigh Bar® movement.
5. Check betwccn supporting structure and weighing structure for debris that might restrict Weigh Bar® movement.
6. Make sure the supporting structure and weighing structure do not touch each other at any point except at the Weigh Bars®.

Next: Compare Weight Readings for All Weigh Bars®:
Position a person or heavy object on the platform above each Weigh Bar®, one bar at a time, and compare weight readings for the same person or same object.

For each weighing, the weight itself will be off-center, favoring a single Weigh Bar®; therefore, none of the readings will be accurate.

However, your readings obtained by weighing the same person or object above each Weigh Bar® should be nearly identical to each other. A single Weigh Bar® reading that is significantly different from the others is probably defective.

Alarm Light Function

If your external alarm works properly but the alarm light fails to illuminate when it should, the problem may be the bulb itself.

Unscrew the red cap. To remove the bulb, grip it, push down, and turn counterclockwise until it releases.

If the bulb is bad, you can replace it at most hardware stores. (Refer to page 28 to test internal relay)

Measuring Supply Battery Voltage

To check battery voltage:

1. Press and hold **GROSS** until ***L. bAtch*** is displayed.
2. Press **MENU** to scroll through menu options until ***battErY*** is displayed.
3. Press **SELECT** to display incoming battery voltage.
4. Press **SELECT** to return to ***battErY***.

Service Repairs

If you find the indicator or one or more of the Weigh Bars® to be defective, contact your supplier, or send your equipment back to the factory for repair, postage prepaid.

Include the following information:

1. Your name and address
2. Supplier name and address
3. Date of purchase
4. **Important:** An informal note describing symptoms of the problem.

Display Messages

H E L L O	Indicator is being reinitialized. Message is displayed briefly at time of power-on.
– – – –	Indicator is in state of over-capacity.
_ _ _ _	Indicator is in state of under-capacity.
E r r o r	System is not functioning properly. Weight is not being calculated because scale weight is too high or too low. (Refer to information on “Indicator Lockup” in **Troubleshooting** section of manual.)
P r i n t	Indicator is transmitting data. Appears after pressing the **PRINT/ID** key.
Pr-All	Indicator is transmitting data. Appears after pressing and holding **PRINT/ID** key.
Lo-bAt	Displayed when input voltage to indicator is between 8 and 10 volts.
H O L D	Used when moving a portable system. Alternates between hold and net weight just loaded or unloaded (see page 21).

Mounting the Model 1015

The Model 1015 mounts on a quick-detach bracket. Weld or bolt the quick-detach bracket into place, as follows:

1. Choose a mounting location that is

   • convenient for operation of the indicator, and
   • protected from moving parts or from other moving machinery.

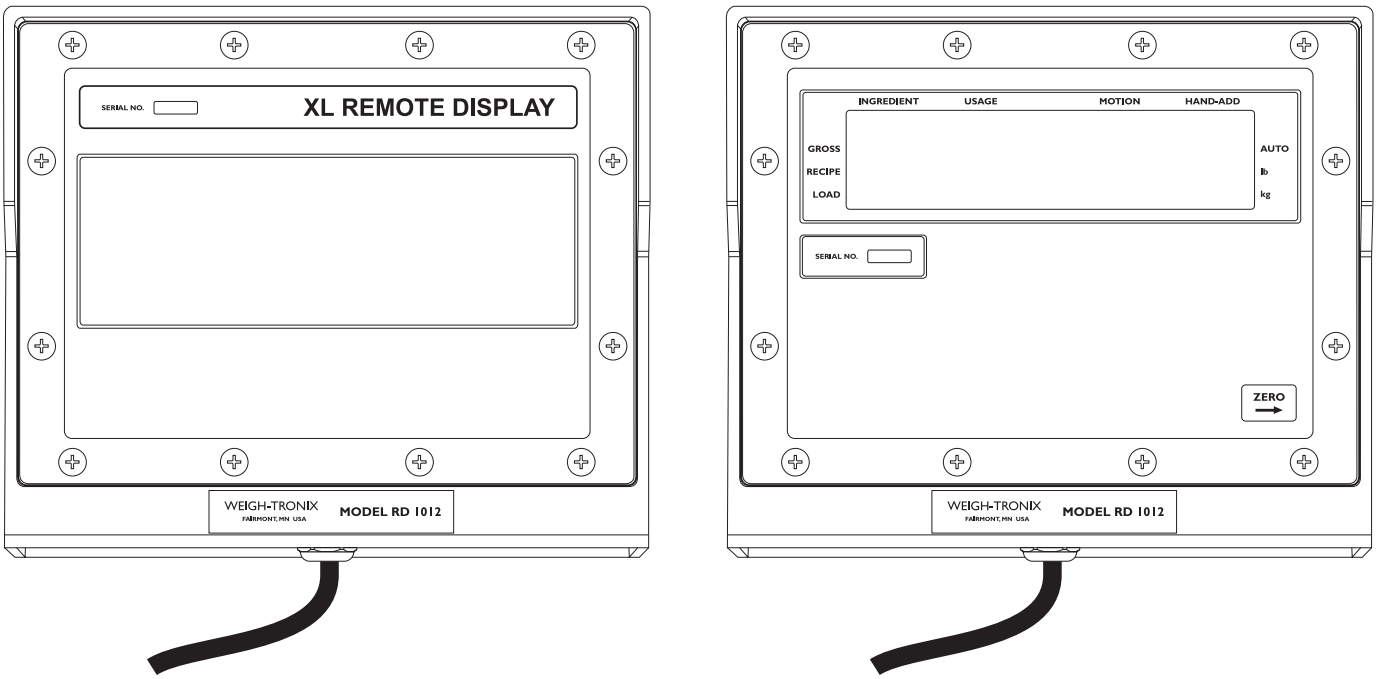
2. Hold the indicator at the proposed mounting location, and verify that the display is legible and the controls accessible.
3. Positioning the quick-detach bracket with the wider end at the top, mark the desired mounting location. If bolting, use the quick-detach bracket as a template and mark and drill holes.
4. Weld or bolt the quick-detach bracket at the appropriate location. If bolting, use double nuts or self-locking nuts to protect both indicator and machinery.
5. Insert the indicator bracket into the quick-detach bracket and push it down into place.
6. For mobile applications, wrap and twist a strong wire around the indicator bracket and the quick-detach bracket to stabilize the mounting.

RD1012 / RD1012XL Remote Display

The RD1012 and RD1012XL are remote displays that are compatible with the Model 1015. (An RD1012 output option is required on the Model 1015 for interfacing.) The interface cable plugs directly into the bottom of the Model 1015 (see Figure 2 below). When using the RD1012, any data displayed on the Model 1015 is also displayed on the RD1012. Only the last six digits from the Model 1015 will be displayed on the RD1012XL.

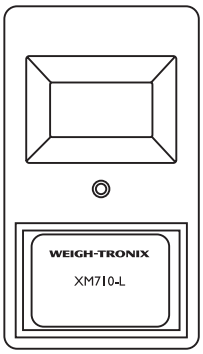
The only function available on the RD1012 is:

ZERO → Pressing this key on the RD1012 performs the same function as pressing **ZERO** on the Model 1015 when 1015 is in Gross mode. When batching a recipe, this key acts as a manual advance or menu key.



An optional radio remote transmitter and receiver (XM710-L) can be installed in either the Model 1015 or the RD1012.

This option lets the user zero and manually advance to the next ingredient from up to 100 feet away.



For the complete flowchart of menu options, refer to the Flowchart Section of this manual.

The test mode is used to test various functions of the 1015 Indicator. The test menu is shown in Figure 4. Instructions for using the test menu are found below.

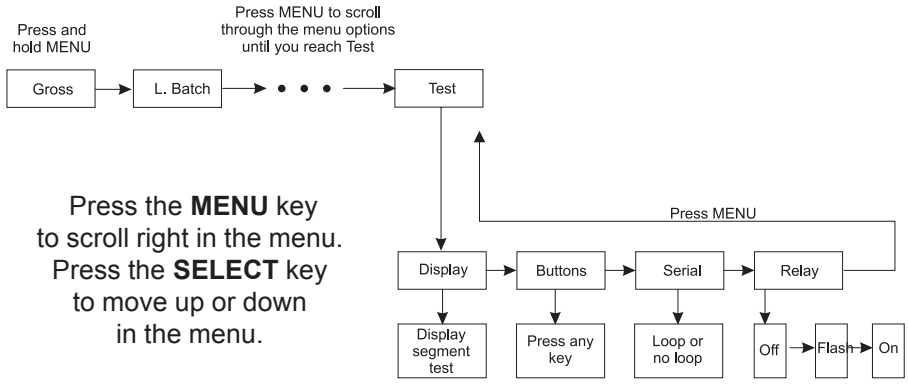


Figure 9
Test Menu

1. Enter the test mode from gross operation by pressing and holding the **MENU** key until *L. bAtch* is displayed. Scroll through the menu options until *tESt* is displayed.
2. To scroll through the menu, press the **MENU** key.
3. To move up or down a level in the hierarchy, press **SELECT**.
4. Press **MENU** to toggle between choices.

Below are the specific directions and explanations for the items you see in the test menu.

DISPLAY — With ***diSPLAY*** displayed, press **SELECT** and a dynamic test is run. Press **SELECT** when the dynamic test is active to return the indicator to ***diSPLAY***.

BUTTONS — With ***buttonS*** displayed, press any key except **MENU** to check for proper key functioning. After testing the buttons, press **MENU** to return to *diSPLAY*.

SERIAL — Tells you if the serial output is ready or busy. Pressing the **MENU** key puts ***LOOP*** or ***no LOOP*** on the display. With pins 2 and 3 connected, ***LOOP*** is displayed. With them disconnected, ***no LOOP*** is displayed.

RELAY — With *rELAY* displayed, press **SELECT**. Press the **MENU** key to scroll through the different alarm light functions. After testing the alarm light, press **SELECT** to return to *rELAY*.

Appendix A: Downloading Information From The 1015

Any of the Model 1015 printouts can be transferred to a computer by following these steps for Windows 3.1® or Windows 95®.

Windows 3.1® Setup

You must have Microsoft Windows® version 3.1

You can use **TERMINAL**, the communications package in Microsoft Windows® 3.1, to download information from the Model 1015 to your computer. Follow these steps to set up this function:

1. Select ACCESSORIES.
2. Select TERMINAL.
3. Select SETTINGS, and then COMMUNICATIONS.
4. Select appropriate COM1 or COM2 port, and make sure the rest of the protocol is selected as follows: (Note: Select 1200 baud rate on Model 1015 : Default setting)

   Baud Rate: 1200

   Data bits: 8

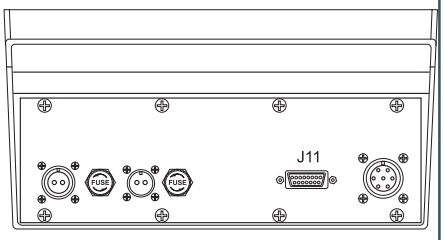
   Stop bits: 1

   Parity: None

   Flow Control: Xon/Xoff

   Then select OK
5. Under FILE, select SAVE, and enter filename M1015.TRM, and select OK.

To Download



J11 Pin	Assignment
2	Transmit data
3	Receive data
7	Logic gnd
4	CTS
12	DTR

1. Take the supplied computer interface cable and plug into COM port (9 pin) on the computer, and the serial port (15 pin) on the bottom of the Model 1015. See diagram at left.
2. Select ACCESSORIES
3. Select TERMINAL.
4. Select FILE and OPEN File M1015.TRM
5. Select TRANSFERS-RECEIVE TEXT FILES.
6. Enter appropriate File name (EX: XXXXXX.TXT)and select OK. Must be a .TXT file.
7. Access appropriate print transfer data on the Model 1015 (see users' manual) and press print , and notice information will start transferring across the screen. Once all the appropriate information is transferred, select STOP to terminate the receiving mode on your computer.
8. Then select TERMINAL (-) and CLOSE, and return to ACCESSORIES window.
9. Now select FILE MANAGER, under WINDOWS directory, and you can find the data file that has the Model 1015 data information.
10. Select your file (EX: DATA1.TXT) and view the information that was transferred from the Model 1015.
11. From this point the user can use this file and do whatever is required. The next time repeat steps 1-10 as required .

Windows 95® Setup

You must have Microsoft Windows® 95.

Use **HYPERTERMINAL**, the communications package in Microsoft Windows 95® to download information from the Model 1015 to the computer.

Setting up the HYPERTERMINAL icon:

1. Click on the Windows 95 START ICON.
2. Go to Programs, then Accessories, and the click on HyperTerminal
3. Double click on the Hyperterminal ICON, and Execute Hypertrm.exe
4. Enter a name for the connection description EXAMPLE: M1015

   and click on the ICON you choose to use for this application.
5. Click on OK and it will ask for Phone Number: On the “connect using” scroll to “Direct to

   Com 1” and click on OK.
6. Now comes up with COM1 properties, select the following settings:

Bits per second:	1200 (std default baud rate for the Model 1015 or any other baud rate as long as it matches the Model 1015)
Data bits:	8
Parity:	None
Stop bits:	1
Flow control:	Xon/Xoff

7. Click on OK and then select File, and Save.
8. Return to Hyperterminal window

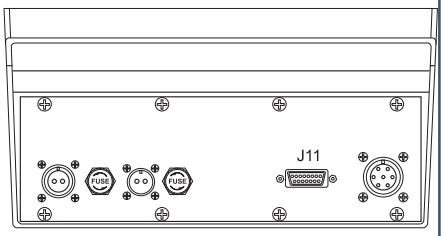
Setting up Model 1015 Shortcut to COM1: .

1. In the Hyperterminal window. right click on the M1015.ht ICON created above.
2. Right click on Shortcut, which will immediately create a shortcut to M1015.ht with the same ICON as before, only with an additional arrow in the ICON.
3. Right click on the new ICON, and then right click on properties.
4. Click on Shortcut, and change “start in” to example c:\winword\dwnld, making sure you have already created this directory in your file manager. Change to where ever you want the shortcut path to store all your M1015.ht shortcut data transfers in that directory to recall the data files later. Then click on OK.

Creating a download directory (REFERENCE)

1. Double click on Explorer Icon.
2. Assuming we want to create c:\winword\dwnld directory, click on C;WINWORD
3. Click on FILE, NEW, FOLDER.
4. In the name field, type in dwnld, and then click on OK. The directory c:\winword\dwnld has now been created for storing all the download files.

To Download



J11 Pin	Assignment
2	Transmit data
3	Receive data
7	Logic gnd
4	CTS
12	DTR

1. Take the supplied computer interface cable and plug into COM port (9 pin)on the computer, and the serial port (15 Pin) on the bottom of the Model 1015 indicator. See illustration at left.
2. Within the HyperTerminal window, double click on the new M1015.ht ICON
3. Click on transfer, and then Capture Text and type in the file you want to save the data transfer in (Example May 21.doc), notice the Capture text screen will come up with the Folder name that you specified above when creating the shortcut. In this example the Folder:C:\winword\dwnld will appear.
4. Then click on Start...
5. Using the Model 1015 transfer the appropriate data from the indicator by pressing PRINT/ID, or holding on the PRINT/ID key to transfer whichever accumulators or batch information to your computer. See earlier sections of this manual on how to transfer appropriate data.
6. Click on File-Save. as your current data transfer will be saved.
7. Click on Call-disconnect, and then return to Hyper-Terminal Windows.
8. Once completed, return to Explorer, and retrieve the saved files, to edit, print, etc.

Specifications

Indicator Enclosure:	Impact/water/dust resistant - polycarbonate struc tural foam enclosure; Dimensions: 8.75 " H X 10.5" W X 6.5"D; Standard Weigh-Tronix mounting bracket on back of indicator
Display:	Eight digit, seven segment LCD, 1.0 inch high characters, 10 annunciators, and fiber optic back-lighting (Annunciators - GROSS, RECIPE, LOAD, INGRE-DIENT, USAGE, MOTION, HAND-ADD, AUTO, lb and kg.)
Display Rate:	One, two or five times per second.
Accuracy:	± .1% of applied load ± 1division, whichever is greater
Linearity:	+ 0.01% of capacity
Repeatability:	+ 0.01 % of capacity or ± 1 division, whichever is greater
Power:	10 to 18 volts DC negative ground at .10 ampere for 4 Weigh Bars®(4-pin), and at .17 ampere for 4 Weigh Bars® (5-pin) Current for remote alarm light—typically 2.2 amperes
Environment:	-20°to 140°F, or -29°to 60°C, to 100% humidity
Weigh Bar® Drive Capacity:	Ten 350 ohm Weigh Bars®
Calibration:	Front panel calibration and spanning for all axle sizes for all types of Weigh Bar® and load cell applications up to 999,999 lb or kg
Zero Balance Range:	±1 mV/V, via front panel push button
Analog Span Range:	0.20 mV/V to 1.0 mV/V (full scale)
Automatic Zero Tracking:	OFF, ± 0.5, 1.0, 2.0, 3.0 5.0, 10.0 divisions
Motion Detection Window:	OFF, ± 0.5, 1.0, 2.0, 3.0, 5.0, 10.0 divisions
Motion Filtering:	Three selections - Normal, Intermediate, and High
Auto Ingredient Tolerance:	OFF (manual), or programmable from ± 1 to 99 %
Alarm Warning:	Programmable to any weight value. Light begins flashing once per second when programmed value has been reached.
Standard Cutoff Output:	Used in conjunction with alarm warning. To be used with standard alarm and light options to indicate when ingredient is approaching target weight. Weigh-Tronix output connector comes standard.
Warranty:	Three-year warranty against defects in material and workmanship

Features

Rugged Construction: Water/dust resistant enclosure for inclement weather and high vibration farm applications.

Selectable Units of Measure: Lb or kg equivalent, front panel selectable

Load/Unload Function: Use alarm light on front panel or optional audible alarm when batching to signal operator that loading or unloading process is approaching a pre-set weight. Use in conjuction with recipes or single ingredient target weight.

External Alarm Connector: Allows you to attach an audible alarm or alarm light for batching operations.

Automatic Hold: Move your grinder/mixer or feed wagon without seeing a change in the displayed weight.

Timer: Use for entering a mix time after all ingredients have been loaded. Timer counts down and activates alarm light when preset time has expired.

Auto/Manual: Configurable for manual or auto advance between ingredients. Can be changed during an operation without returning to a special programming mode by pressing **LOAD/UNLOAD** key.

Large Memory: Can program up to 100 recipes with 10 ingredients per recipe or a total of 1000 memory locations. Scrolling abilities make it simple to view recipes and ingredients.

Inventory: Ability to accumulate inventory on all recipes and ingredients. All batched records are stored for keeping track of total recipe and ingredient usage. Scrolling abilities make it simple to view inventory accumulations (Maximum of 999,999 lb or kg total accumulations).

Hand-Adds: Include hand-add ingredients as part of the recipe for better accuracy of the total recipe batched. Useful for pre-weighed ingredient amounts or small amounts that cannot be weighed accurately on the system.

Last Batch: Recall batching information on the last recipe which was completed. Useful for verifying which recipe was last batched.

Power Fail Recovery: When turning on after a power failure, indicator returns to where the user was before the power failed. Useful for continuing a batch or any other procedure.

Front Panel Programming and Calibration: On site calibration. All functions performed through keypad. Selectable calibration for other uses without the need for weights. User can easily switch between applications.

Low Power Requirements:	Current drain of only 0.10 to 0.180 amperes gives extended life to your battery power source.
Automatic Turn-off:	If voltage is less than 9.5 volts or higher than 18 volts, the power supply turns unit off to protect the battery from draining. Low battery indication when input drops below 10 volts.
Choice of Connectors:	Allows field retrofit for any scale system; three connector 4-pin or 5-pin, four connector 4-pin or 5-pin, or one 7-pin connector for interface with junction box.
Constant On:	Can be setup to stay on whenever power is present. Useful for bin inventory applications. Consult factory.

Options

RS232 Serial Output:	Includes battery backed up time and date baud rate selectable: 9600, 4800, 2400, 1200, 600 and 300 xon/xoff, 8 data bits, one stop bit, no parity. Initiate serial transmission using **PRINT/ID** button, bidirectional communications, auto print after batch and, broadcast mode.
RD1012 Output:	To be used with the new RD1012 remote display
Remote Zero/ Ingredient Advance:	Includes optional remote radio receiver and transmitter to allow remote zero and ingredient advance from up to 100 ft. away from indicator.

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